## BOOK REVIEW

Grzimek's Animal Life Encyclopedia. Vol. 2 Insects. 1975. Van Nostrand Reinhold Co., 450 W. 33rd St., New York, New York 10001. \$29.95 each volume, \$325.00 for the 13 volume set. (First published in Switzerland in 1969). Edited by: Franz Bachmaier, Wolfgang Dierl, Eberhard Ernst, Bernhard Grzimek, Hubert Markl, Werner Rathmayer, Peter Rietschel, Friedrich Schaller, Richard zur Strassen, Heinz Wundt, and Fritz Zumpt. Scientific editor: Erich Klinghammer; Translator: M. A. Biederman-Thorson; Scientific consultant: Ross H. Arnett, Jr.

This is one of the volumes in a beautiful set of encyclopedias covering the entire animal kingdom; others include 1) lower animals, 3) mollusks and echinoderms, 4)

fishes I, 5) fishes II and amphibians, 6) reptiles, 7-9) birds, 10-13) mammals.

The Coleoptera are treated on pages 231 to 308, authored by R. zur Strassen. There are 12 gorgeous plates of beetles painted by K. Grossmann and 8 plates of color photos. The figure numbers are not arranged in order, causing some confusion when

trying to locate a specific figure.

Misspellings of scientific names were noted in figure legends (e.g., page 248, fig. 8, Choirotonus should be Cheirotonus) and in the systematic section at the end. Some incorrect names were noted (e.g., page 251, fig. 4, Dynastes gideon should be Xylotrupes). The Coleoptera section contains little new information, and falls short in attempting to treat the whole Order in such a small amount of space. Only because of popularity, and not because of importance, do birds rate 3 vols. and mammals rate 4 vols. However, the treatment is well-done, although most examples are European.

The Stylopidae are treated as a specialized family of Coleoptera. One statement made regarding the family is completely unsupported and seems to be useless speculation to me: "... only about 400 species have been described so far, one can expect

that there will be about 1000 altogether."

There is a "systematic classification" section on pages 537-561 which does little to clarify and appears to do nothing but list a few examples of genera and species in a few families. I believe it could have been omitted in its present form without any great loss.

There is a valuable dictionary of common names in English, German, French, and Russian. This occupies pages 565-618 and is the most complete such list that I know about. It would be useful if other languages could be added in future editions. There is a set of metric conversion tables which, although useful, occupy space that could

have enlarged treatment of the Coleoptera.

One great disappointment is the section on supplemental reading (p. 625-627). Although an encyclopedia is usually thought of as the most ex-tensive treatment of a subject, it cannot hope to cover the more than 1 million insects. Therefore some emphasis should be placed on sending the reader to monographs, books, and periodicals which can complete the picture. Very few references are listed and these seem to have been randomly chosen. General works which are conspicuously absent are: Arnett's "Beetles of the United States"; Borror and White's "Field guide to the insects", Klot's "Field guide to the butterflies", etc. At the same time Lutz's (1935) "Field guide to the insects" is listed, along with such specialized items as Selander and Mathieu's 1969 paper on ecology, behavior, and anatomy of the albida group of Epicauta. Ironically a half page was left blank (p. 627) at the end of 21/2 pages of references. Surely that space could have been put to good use by listing more books and monographs.

Although most of my remarks have been critical so far, I believe this to be a valuable addition to any entomologist's library. It is certainly pleasant to see such a beautiful volume (and set) offered at a reasonable price, when so many recent

volumes are bleeding the scientific community.

-R. E. Woodruff